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July 19, 2018

PLANNING BOARD GRAFTON, MA

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Subject:

**Proposed Department of Public Works Facility** 

48 Old Westboro Road

Special Permit, Site Plan and Stormwater Regulations Review

Dear Joe and Maria:

We received the following documents on July 6, 2018:

- Plans entitled <u>Grafton, MA Department of Public Works Facility, Site Plan Review dated</u> June 2018, prepared by Weston & Sampson for the Town of Grafton. (24 sheets)
- Bound document entitled <u>Application for Grafton Stormwater Management Bylaw Permit,</u> <u>New Department of Public Works Facility</u> dated June 19, 2018, prepared by Weston & Sampson.
- Bound document entitled New DPW Facility, Application for Site Plan Review and Special Permit dated June 2018, prepared by Weston & Sampson for the Town of Grafton.
- Bound document entitled <u>Traffic Study</u>, <u>New DPW Facility</u>, <u>Application for Site Plan Review and Special Permit</u> dated June 2018, prepared by Weston & Sampson for the Town of Grafton.

We also received the following document on July 19, 2018:

Bound document entitled <u>Earthwork Report, New DPW Facility, Application for Site Plan</u>
<u>Review and Special Permit</u> dated June 2018, prepared by Weston & Sampson for the
Town of Grafton.

Graves Engineering, Inc. (GEI) has been requested to review and comment on the plans' conformance with applicable "Grafton Zoning By-Law" amended through May 14, 2018; Massachusetts Department of Environmental Protection (MassDEP) Stormwater Handbook and standard engineering practices on behalf of the Planning Board. GEI has also been requested to review and comment on the documents' conformance with applicable Conservation Commission "Regulations Governing Stormwater Management" dated May 2013 on behalf of the Conservation Commission. As part of this review GEI visited the site on July 18, 2018.

Our comments follow:

### **Zoning By-Law**

- Ownership information of all abutting properties within 200 feet of the project property lines must be shown on the plans. The abutter information for 55 Old Westboro Road must be added to the plans. (§1.3.3.3.d.11)
- 2. GEI has no issue with the design engineer's request to prepare the hydrological study in accordance with the <u>Conservation Commission Regulations Governing Stormwater Management</u>. (§1.3.3.3.e)

## **Grafton's Regulations Governing Stormwater Management**

3. GEI has reviewed the Stormwater Management Plan and has no issues relative to compliance with the Grafton Stormwater Management Standards.

# Hydrology & MassDEP Stormwater Management Review

- 4. GEI reviewed the hydrology computations and found them to be in order.
- 5. The top of the impoundment berm for the infiltration basin and Rain Garden No. 1 was reasonably modeled as being at elevation 495.67 feet but the plans don't identify the proposed elevation of the top of the impoundment, and the proposed 494-foot and 495-foot topographic contours indicate that the top of the impoundment will be lower than elevation 495 feet. The proposed topography on the plans will need to be coordinated with the hydrology computations to provide sufficient freeboard above the 100-year water surface elevation. Likewise, for Rain Garden #2, the top of the impoundment was modeled as elevation 506.08 but Sheet C5.02 shows a spot elevation of 505.03 and what appear to be proposed 505 topographic contours close to each other on the south end of the rain garden (suggesting a narrow top-of-berm).
- 6. Compliance with MassDEP Stormwater Handbook is reasonable.

#### General Engineering

- 7. Labels need to be provided for the proposed topographic contours on the inside of the rain gardens' impoundment berms.
- 8. The plans need to show the proposed tree line.
- 9. GEI performed a cursory review of the Traffic Study, with emphasis on sight distances. The Study appeared to be in order. The Study found adequate stopping sight distances and discussed minor clearing of underbrush and trees to improve intersection sight distances at the entrance/exit driveway. GEI concurs with the proposed tree pruning as noted on the upper section of Sheet C3.00 (clearing on both sides of the entrance/exit driveway and on the west side of the exit-only driveway), but the work should also include mowing of grasses and cutting of underbrush. The Study also found that the proposed facility will have a negligible effect on nearby traffic operations; we have no reason to dispute this finding.

10. If Grafton DPW wishes to accommodate "low bed" trailer deliveries to the facility, then trailer clearance should be evaluated where the exit-only driveway intersects Old Westboro Road; the change in grade may be too abrupt.

## **General Comments**

- 11. GEI did not review the fire cistern nor the architectural plans.
- 12. GEI has not reviewed the plans with respect to the fuel storage and dispensing system. We understand that the Grafton Fire Department will review the proposed fuel storage and dispensing design.

We trust this letter addresses your review requirements. Feel free to contact this office if you have any questions or comments.

Very truly yours,

Grayes Engineering, Inc.

Jeffrey M. Walsh, P.E.

Vice/President

cc: James Fair, P.E.; Weston & Sampson Andy Deschenes; Weston & Sampson

Paul Cournoyer; Grafton DPW